18188 - Completing the Hyades High-Energy Main Sequence

Cycle: 33, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*
Dr. Thomas R. Ayres (PI) (Contact)	**University of Colorado at Boulder**

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) HD-25825	COS/FUV COS/NUV	1	05-Nov-2025 09:00:13.0	yes
02	(2) HD-26736	COS/FUV COS/NUV	1	05-Nov-2025 09:00:13.0	yes
03	(3) HD-26767	COS/FUV COS/NUV	1	05-Nov-2025 09:00:14.0	yes
04	(4) HD-27250	COS/FUV COS/NUV	1	05-Nov-2025 09:00:14.0	yes
05	(5) HD-27282	COS/FUV COS/NUV	1	05-Nov-2025 09:00:14.0	yes
06	(6) HD-27406	COS/FUV COS/NUV	1	05-Nov-2025 09:00:15.0	yes
07	(7) HD-28205	COS/FUV COS/NUV	1	05-Nov-2025 09:00:15.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
08	(8) HD-28237	COS/FUV COS/NUV	1	05-Nov-2025 09:00:16.0	yes
09	(9) HD-28593	COS/FUV COS/NUV	1	05-Nov-2025 09:00:16.0	yes
10	(10) HD-28992	COS/FUV COS/NUV	1	05-Nov-2025 09:00:16.0	yes
11	(11) HD-29419	COS/FUV COS/NUV	1	05-Nov-2025 09:00:17.0	yes
12	(12) HD-30589	COS/FUV COS/NUV	1	05-Nov-2025 09:00:17.0	yes

12 Total Orbits Used

ABSTRACT

The nearby Hyades cluster (d=47 pc) is a gold standard for the Solar-Stellar Connection: it presents an accessible, well-populated Main Sequence of Sunlike stars of the same age (~600 Myr) and chemical composition; ideal subjects to test the origins and consequences of high-energy (X-rays and ultraviolet) magnetic activity. An existing joint Chandra/HST project has covered the cooler part of the Hyades MS, G9V-K7V. The present proposal is to complete the MS coverage with new HRC-I and COS pointings on the warmer side, F7-G6. Chandra X-rays and HST FUV emission lines provide complementary views of the multi-MK coronal activity, to help constrain theories of exoplanet atmospheric escape as well as the dynamo generation of stellar magnetic fields.

OBSERVING DESCRIPTION

The objective of the observing program is to obtain full-coverage FUV spectra of 12 sunlike stars in the nearby Hyades open cluster (d~47 pc). The stars in the cluster are young (~600 Myr), rotating more rapidly than the 4.5 Gyr Sun, and are expected to display hot outer atmospheres (10,000 K - 10 MK) symptomatic of strong magnetic dynamo activity. The resulting FUV spectra will be dominated by strong emission lines, such as C II 133 nm (30,000 K), Si III 120 nm (50,000 K), Si IV 139 nm (80,000 K), C IV 154 nm (100,000 K), and N V 123 nm (200,000 K). FUV line intensitites of the Hyades targets can be estimated from HST/STIS spectra of young field stars of the solar neighborhood, such as Chi1 Orionis (G0V), and are expected to be too faint for the STIS echelle modes, and marginal for the COS G modes, at least in the 1-orbit pointings desirable for a survey program (in support of a Chandra survey of the coronal X-ray emissions of the stars). This leaves the more sensitive L modes of both STIS and COS

as options to obtain high-quality FUV tracings (integrated line intensities with S/N close to, or exceeding, 20:1). The COS G140L-1105 setting is preferred over STIS G140L-1425, because the COS version has significantly higher spectral resolution, important for separating close spectral blends.

The targets are captured using a COS NUV imaging ACQ, which requires the Bright Object Aperture and Mirror-A or B depending on the target brightness. The COS ETC-predicted ACQ exposure times, based on the target V magnitude and appropriate Castelli-Kurucz model SEDs, range from a few seconds to about 40 s. The subsequent G140L-1105 exposure is in Time-Tag mode, on Segment A, utilizing the four default FP-POS splits, to fill out the single orbit. The per-split exposure times vary from 462-485 s, for a total of about 1.9 ks. The S/N estimates in the COS spectroscopic ETC were obtained using a distance-scaled STIS FUV+NUV spectrum of the Hyades-age G0V star Chi1 Ori, mentioned earlier. There were no safety issues identified by the ETC. (The bright Lyman-alpha line predicted from the reference star Chi1 Ori was not flagged by the ETC, and the actual hydrogen intensity for the Hyades stars would be further reduced by the additional ISM absorption between 9 pc Chi1 Ori and the 47 pc cluster members.)

Visit

Proposal 18188, Visit 01, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-25825	RA: 04 06 16.1277 (61.5671987d) Dec: +15 41 53.23 (15.69812d) Equinox: J2000	Proper Motion RA: +118.965 mas/yr Proper Motion Dec: -19.715 mas/yr Parallax: 0.021175" Epoch of Position: 2000 Radial Velocity: +37.5 km/sec	V=7.811+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

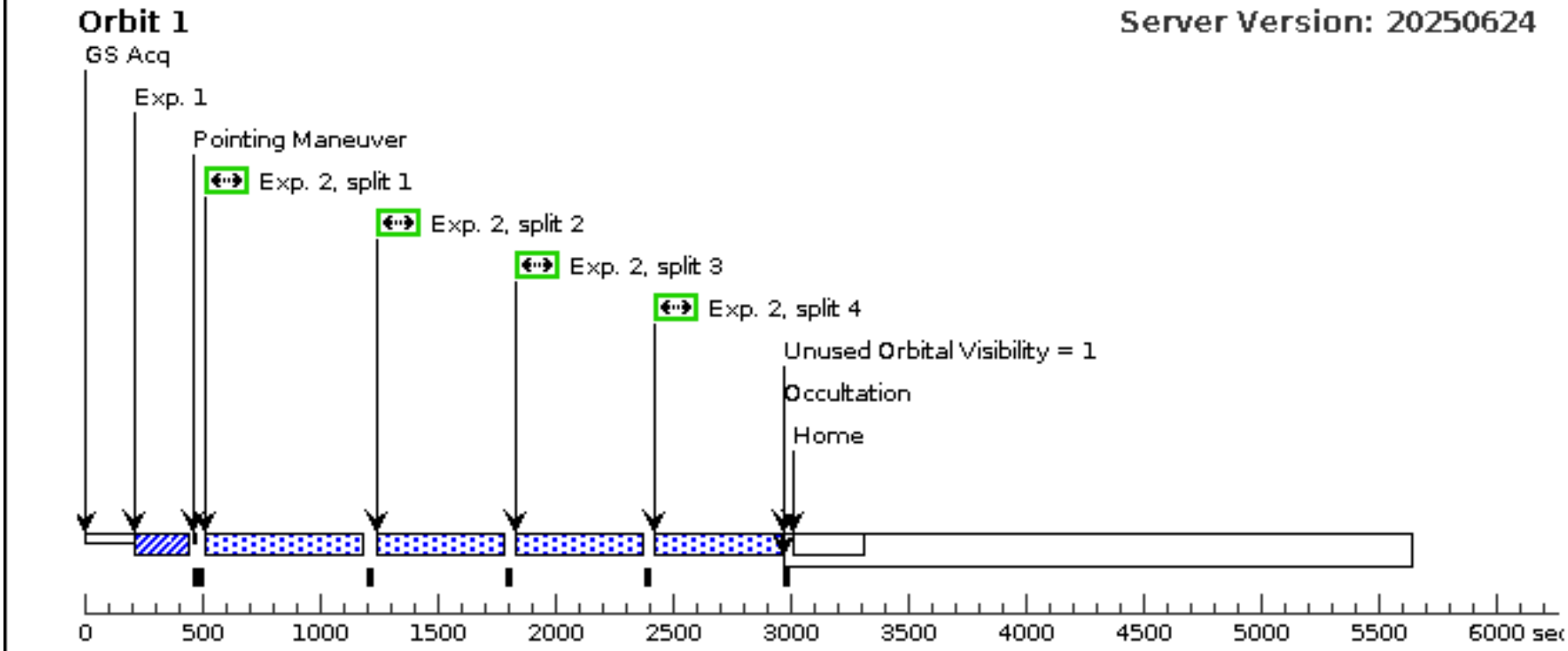
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026677)	(1) HD-25825	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				4 Secs (4 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(1) HD-25825	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			485 Secs (1940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models G0V 6000 4.5
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 7.811 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.

Orbit Structure



Visit

Proposal 18188, Visit 02, implementation Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	HD-26736	RA: 04 14 32.3145 (63.6346438d) Dec: +23 34 29.80 (23.57494d) Equinox: J2000	Proper Motion RA: +119.804 mas/yr Proper Motion Dec: -48.183 mas/yr Parallax: 0.021994" Epoch of Position: 2000 Radial Velocity: +37.63 km/sec	V=8.047+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

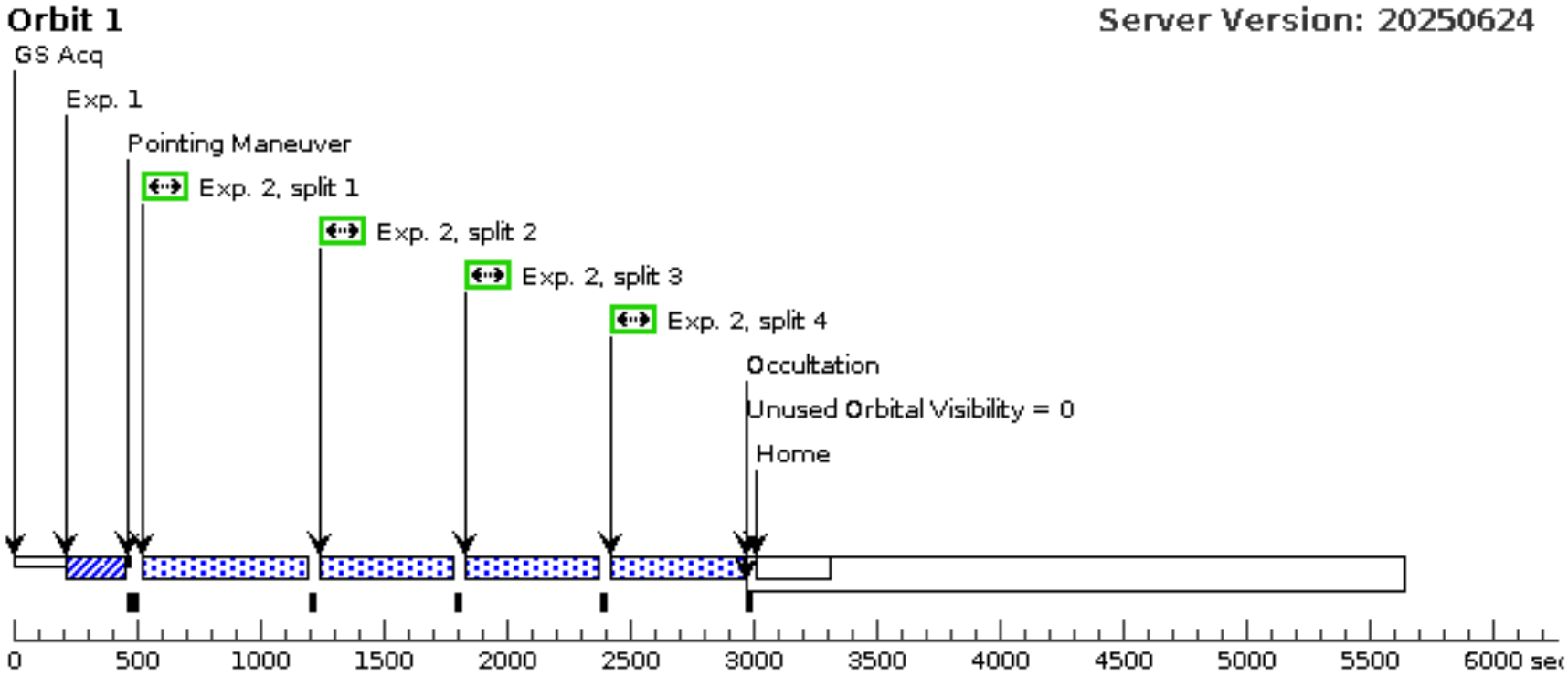
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026678)	(2) HD-26736	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				5.5 Secs (5.5 Secs) *[==>]*	*[1]*
2	(COS.sp.2026696)	(2) HD-26736	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			485 Secs (1940 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*

Comments: Spectrum: Castelli-Kurucz Models G2V 5750 4.5
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 8.047 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.

Orbit Structure



Visit

Proposal 18188, Visit 03, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

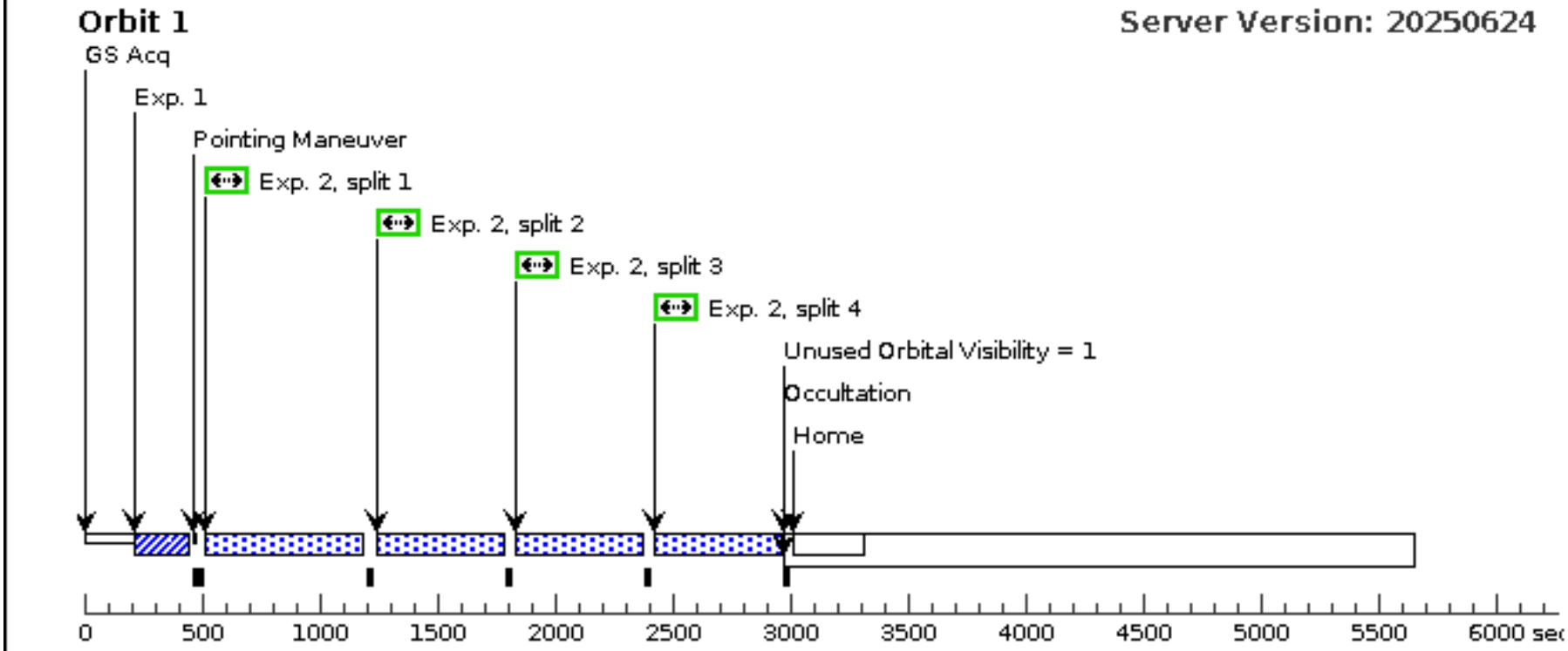
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	HD-26767	RA: 04 14 27.2546 (63.6135608d) Dec: +12 26 7.13 (12.43531d) Equinox: J2000	Proper Motion RA: +114.731 mas/yr Proper Motion Dec: -13.099 mas/yr Parallax: 0.0210557" Epoch of Position: 2000 Radial Velocity: +38.32 km/sec	V=8.030+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026679)	(3) HD-26767	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				5 Secs (5 Secs) *[==>]*	 ***[1]***
Comments: Spectrum: Castelli-Kurucz Models G2V 5750 4.5 *Extinction E(B-V): None* *Normalization: Renormalized to vegamag = 8.03 in filter Johnson/V*									
2	(COS.sp.2026696)	(3) HD-26767	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			484 Secs (1936 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.									

Orbit Structure



Visit

Proposal 18188, Visit 04, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	HD-27250	RA: 04 18 57.9746 (64.7415608d) Dec: +19 54 24.12 (19.90670d) Equinox: J2000	Proper Motion RA: +112.851 mas/yr Proper Motion Dec: -36.538 mas/yr Parallax: 0.0214467" Epoch of Position: 2000 Radial Velocity: +38.72 km/sec	V=8.597+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

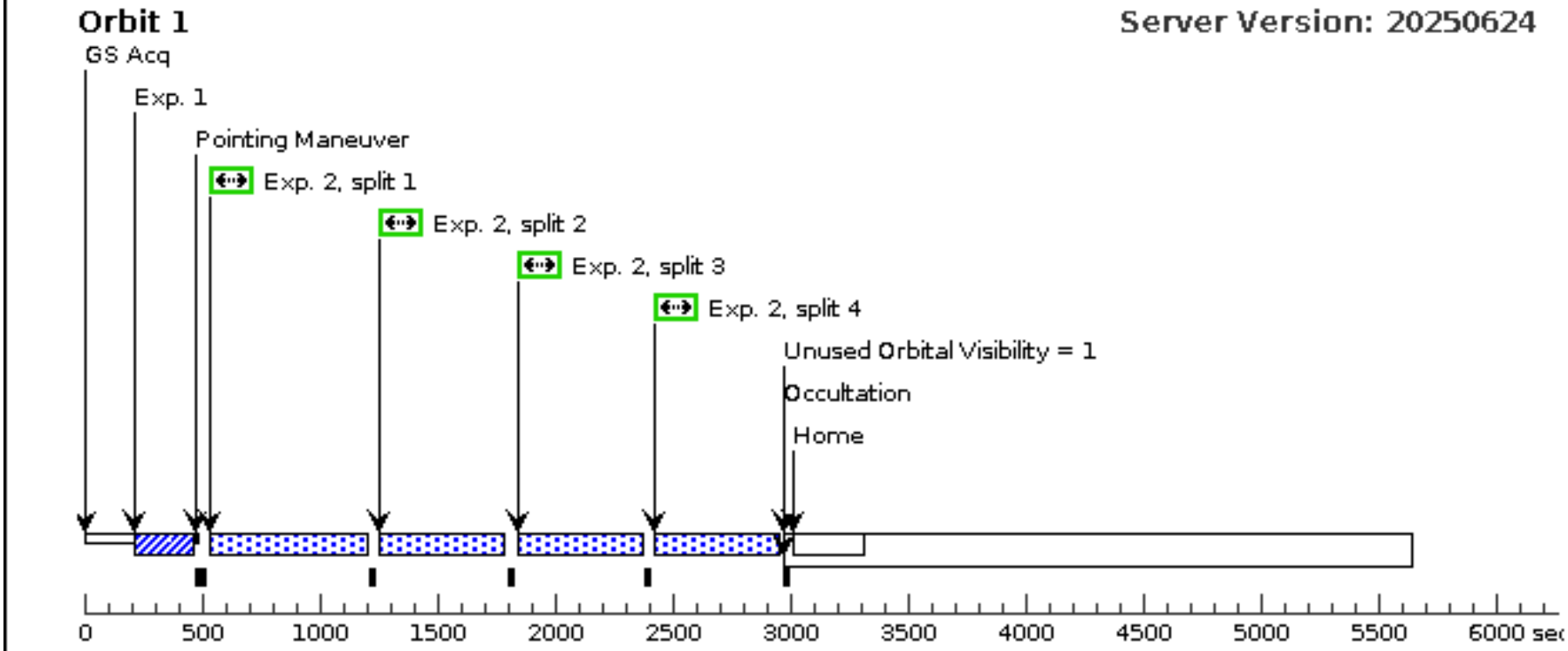
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026680)	(4) HD-27250	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				12 Secs (12 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(4) HD-27250	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			481 Secs (1924 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models G8V 5500 4.5
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 8.597 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.

Orbit Structure



Visit

Proposal 18188, Visit 05, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	HD-27282	RA: 04 19 8.0079 (64.7833663d) Dec: +17 31 29.12 (17.52476d) Equinox: J2000	Proper Motion RA: +113.125 mas/yr Proper Motion Dec: -27.852 mas/yr Parallax: 0.0213907" Epoch of Position: 2000 Radial Velocity: +38.09 km/sec	V=8.427+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

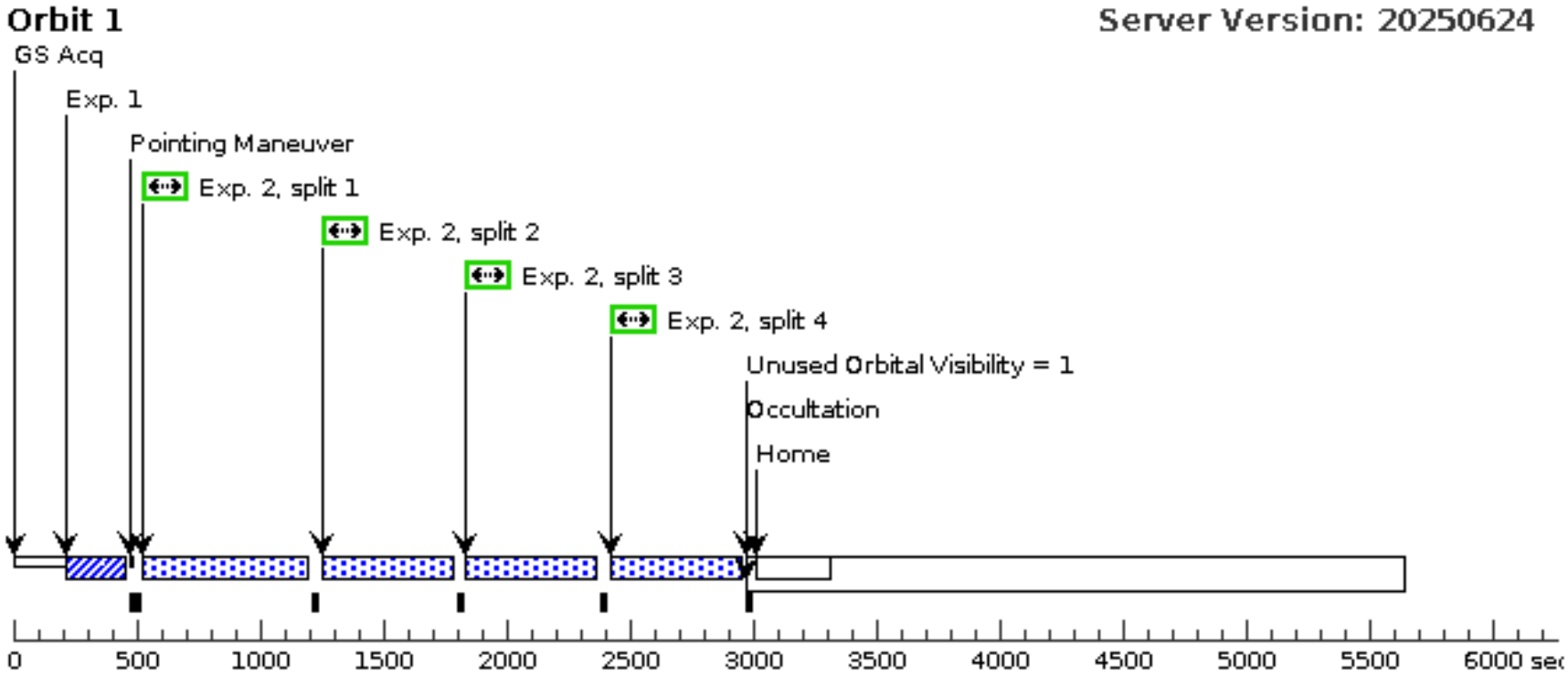
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026681)	(5) HD-27282	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				10 Secs (10 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(5) HD-27282	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			482 Secs (1928 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models G8V 5500 4.5
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 8.427 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.

Orbit Structure



Visit

Proposal 18188, Visit 06, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	HD-27406	RA: 04 20 12.9666 (65.0540275d) Dec: +19 14 0.52 (19.23348d) Equinox: J2000	Proper Motion RA: +114.586 mas/yr Proper Motion Dec: -35.172 mas/yr Parallax: 0.022020" Epoch of Position: 2000 Radial Velocity: +38.40 km/sec	V=7.444+/-0.1	Reference Frame: ICRS

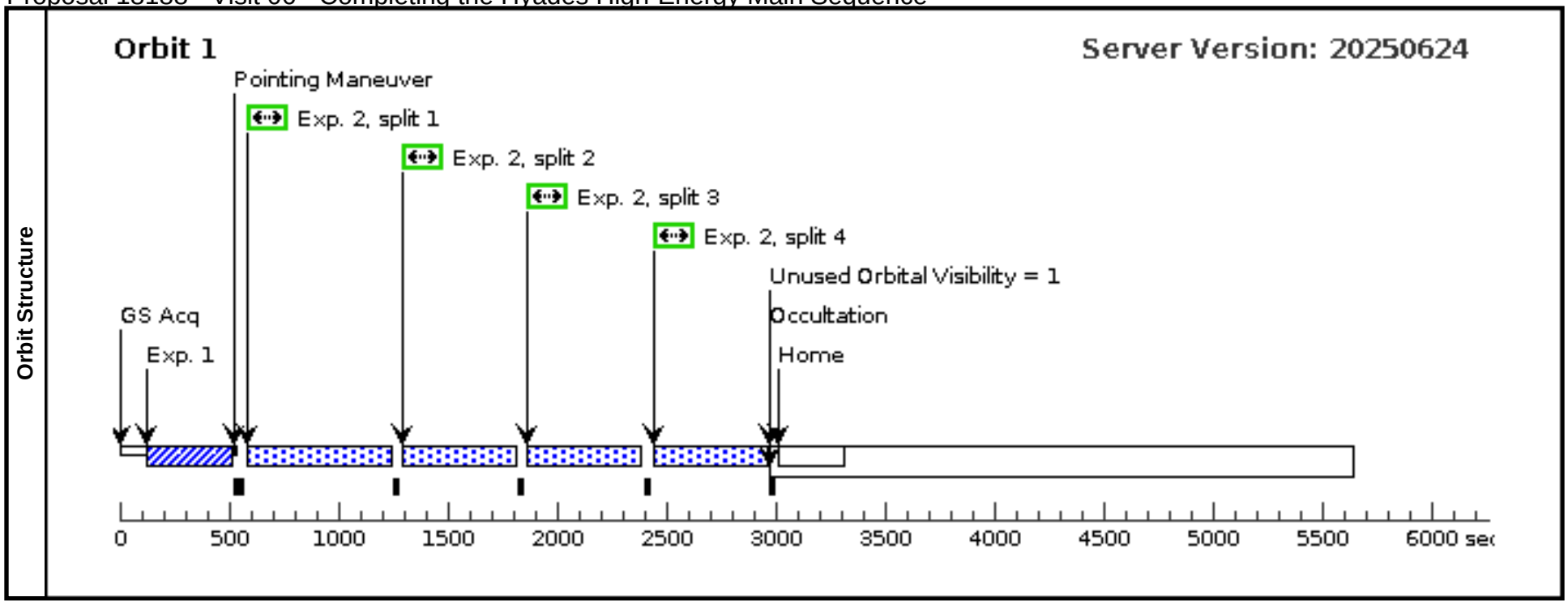
Comments:
Category=STAR
Description=[F3-F9]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026684)	(6) HD-27406	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				38 Secs (38 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(6) HD-27406	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			468 Secs (1872 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models F8V 6250 4.0
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 7.444 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.


Orbit Structure
Orbit 1
Server Version: 20250624
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Unused Orbital Visibility = 1
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18188, Visit 07, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	HD-28205	RA: 04 27 35.8912 (66.8995467d) Dec: +15 35 21.09 (15.58919d) Equinox: J2000	Proper Motion RA: +105.167 mas/yr Proper Motion Dec: -23.914 mas/yr Parallax: 0.021284" Epoch of Position: 2000 Radial Velocity: +39.24 km/sec	V=7.404+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[F3-F9]
Extended=NO

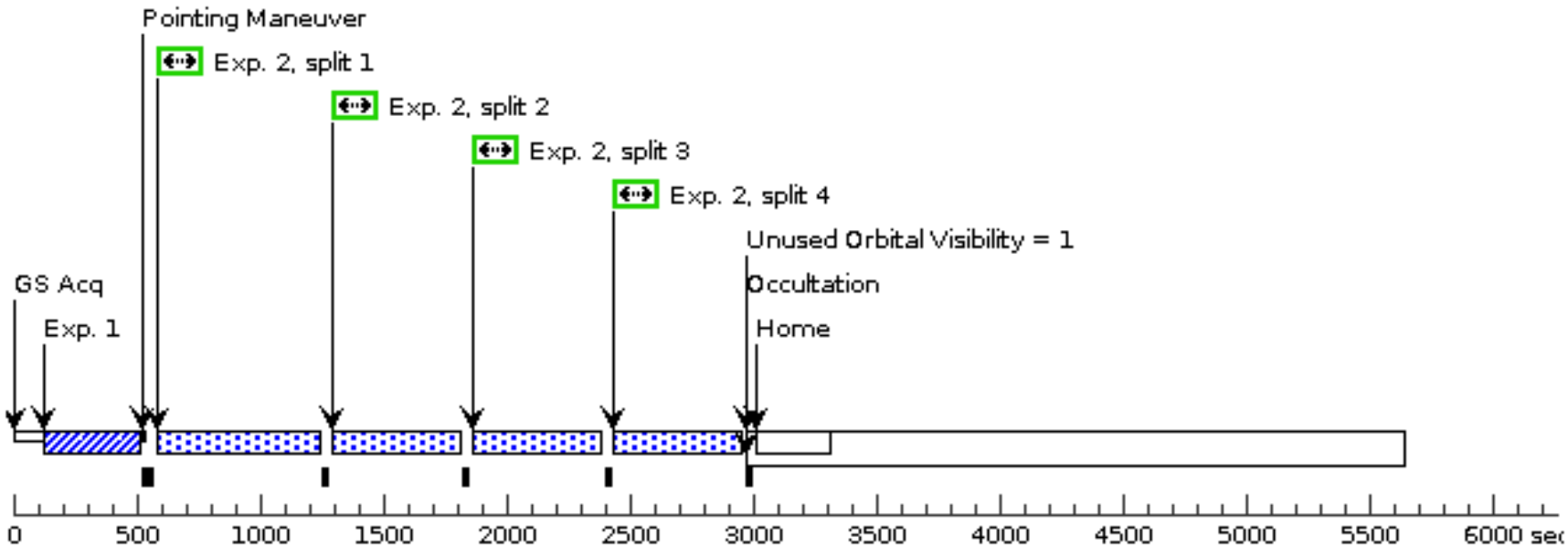
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026685)	(7) HD-28205	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				36 Secs (36 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(7) HD-28205	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			469 Secs (1876 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models F8V 6250 4.0
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 7.404 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.

Orbit Structure



Visit

Proposal 18188, Visit 08, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

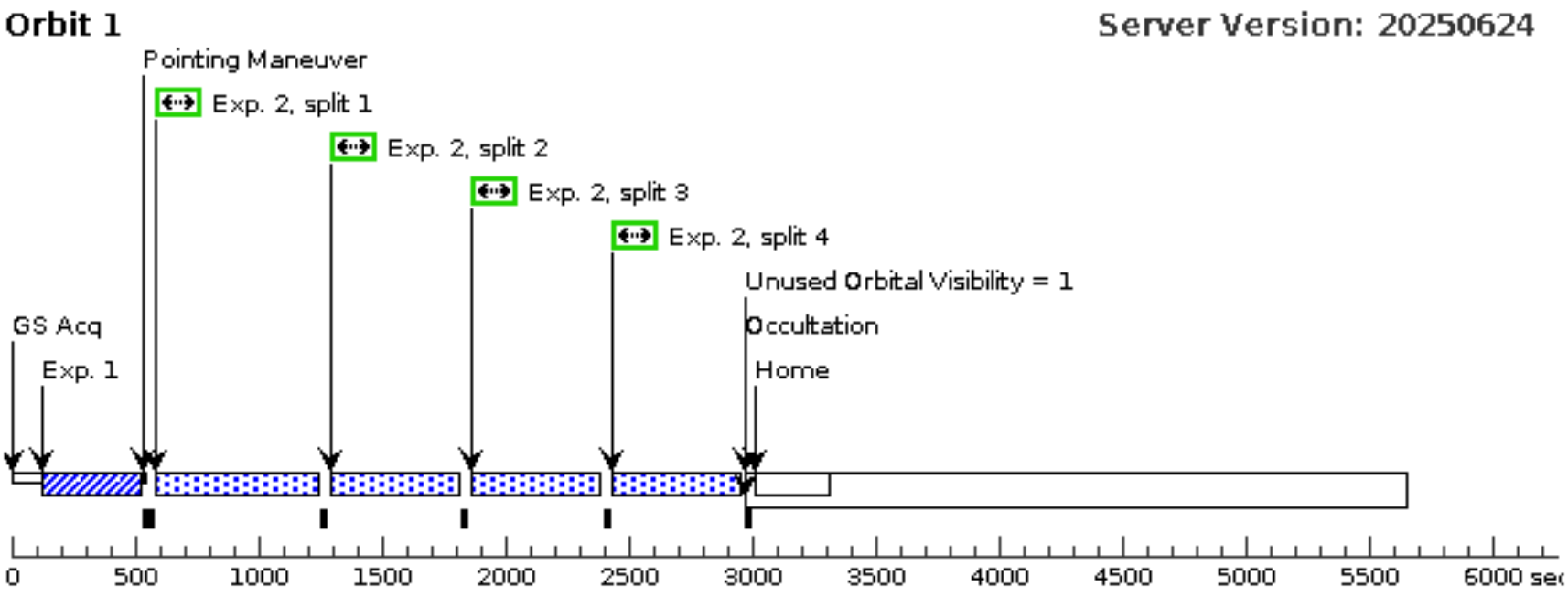
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	HD-28237	RA: 04 27 46.0746 (66.9419775d) Dec: +11 44 11.11 (11.73642d) Equinox: J2000	Proper Motion RA: +110.052 mas/yr Proper Motion Dec: -12.423 mas/yr Parallax: 0.0221517" Epoch of Position: 2000 Radial Velocity: +39.63 km/sec	V=7.482+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[F3-F9]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026686)	(8) HD-28237	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				39 Secs (39 Secs) *[==>]*	 ***[1]***
Comments: Spectrum: Castelli-Kurucz Models F8V 6250 4.0 *Extinction E(B-V): None* *Normalization: Renormalized to vegamag = 7.482 in filter Johnson/V*									
2	(COS.sp.2026696)	(8) HD-28237	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			467 Secs (1868 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.									

Orbit Structure



Visit

Proposal 18188, Visit 09, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	HD-28593	RA: 04 31 15.6941 (67.8153921d) Dec: +20 07 59.41 (20.13317d) Equinox: J2000	Proper Motion RA: +106.533 mas/yr Proper Motion Dec: -39.295 mas/yr Parallax: 0.0217095" Epoch of Position: 2000 Radial Velocity: +39.83 km/sec	V=8.572+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

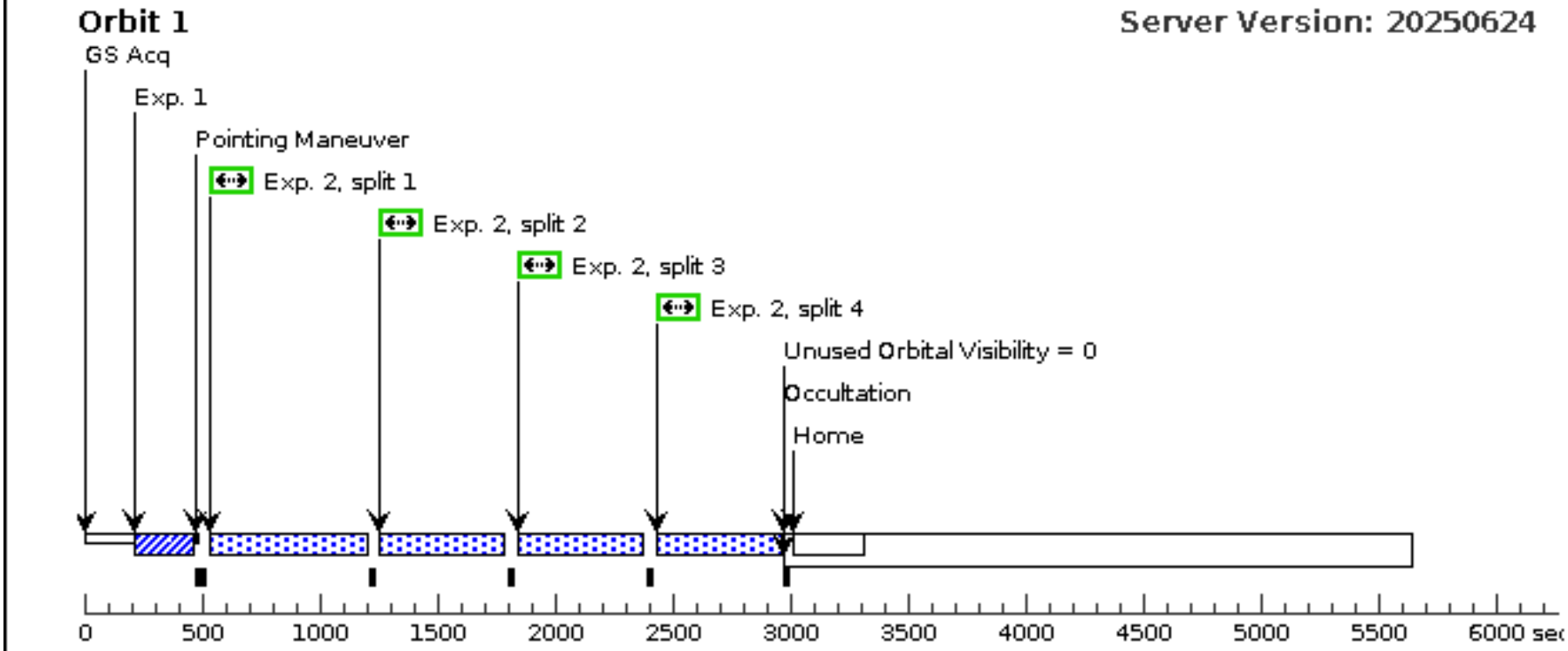
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026688)	(9) HD-28593	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				11.5 Secs (11.5 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(9) HD-28593	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			482 Secs (1928 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models G8V 5500 4.5
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 8.572 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.

Orbit Structure



Visit

Proposal 18188, Visit 10, scheduling Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	HD-28992	RA: 04 34 35.3101 (68.6471254d) Dec: +15 30 16.64 (15.50462d) Equinox: J2000	Proper Motion RA: +100.963 mas/yr Proper Motion Dec: -26.814 mas/yr Parallax: 0.021669" Epoch of Position: 2000 Radial Velocity: +40.43 km/sec	V=7.898+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

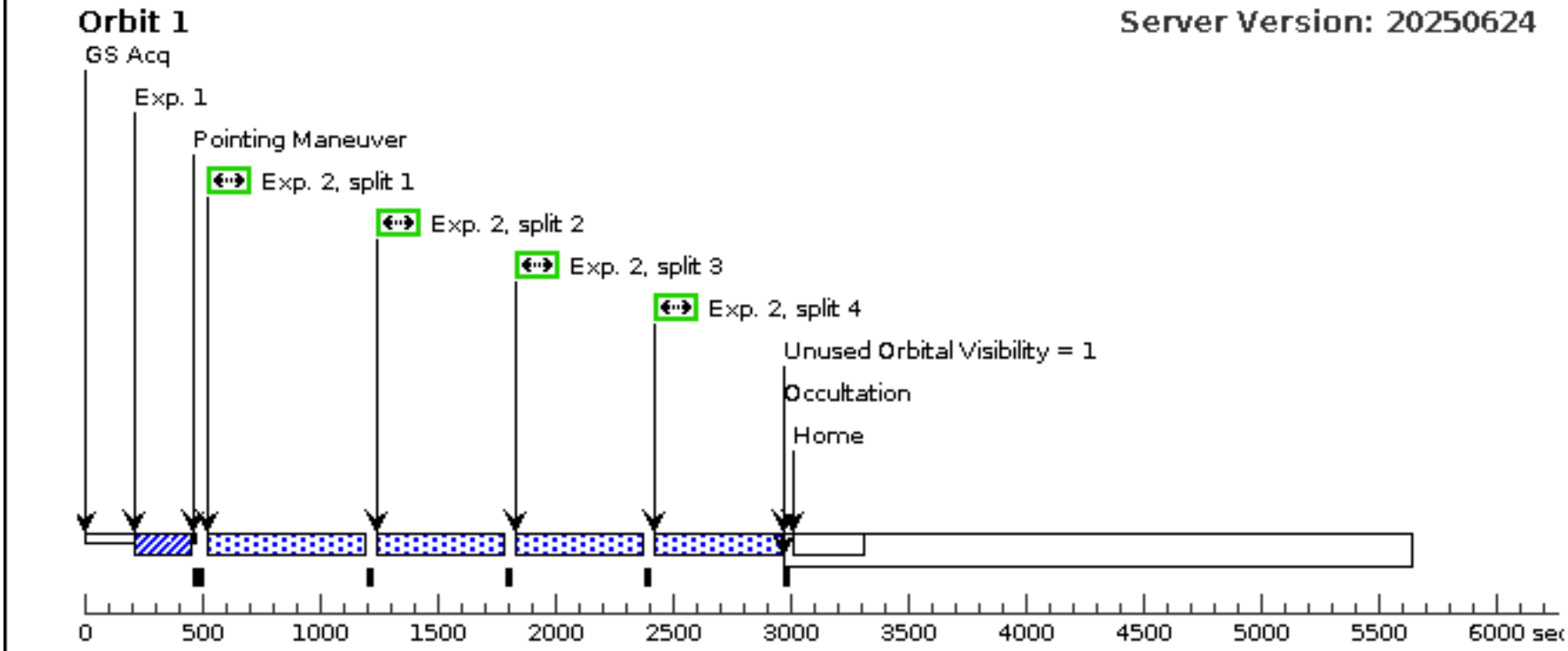
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026691)	(10) HD-28992	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				6 Secs (6 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(10) HD-28992	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			484 Secs (1936 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models G2V 5750 4.5
Extinction E(B-V): None
Normalization: Renormalized to vegamag = 7.898 in filter Johnson/V

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.

Orbit Structure



Visit

Proposal 18188, Visit 11, implementation Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

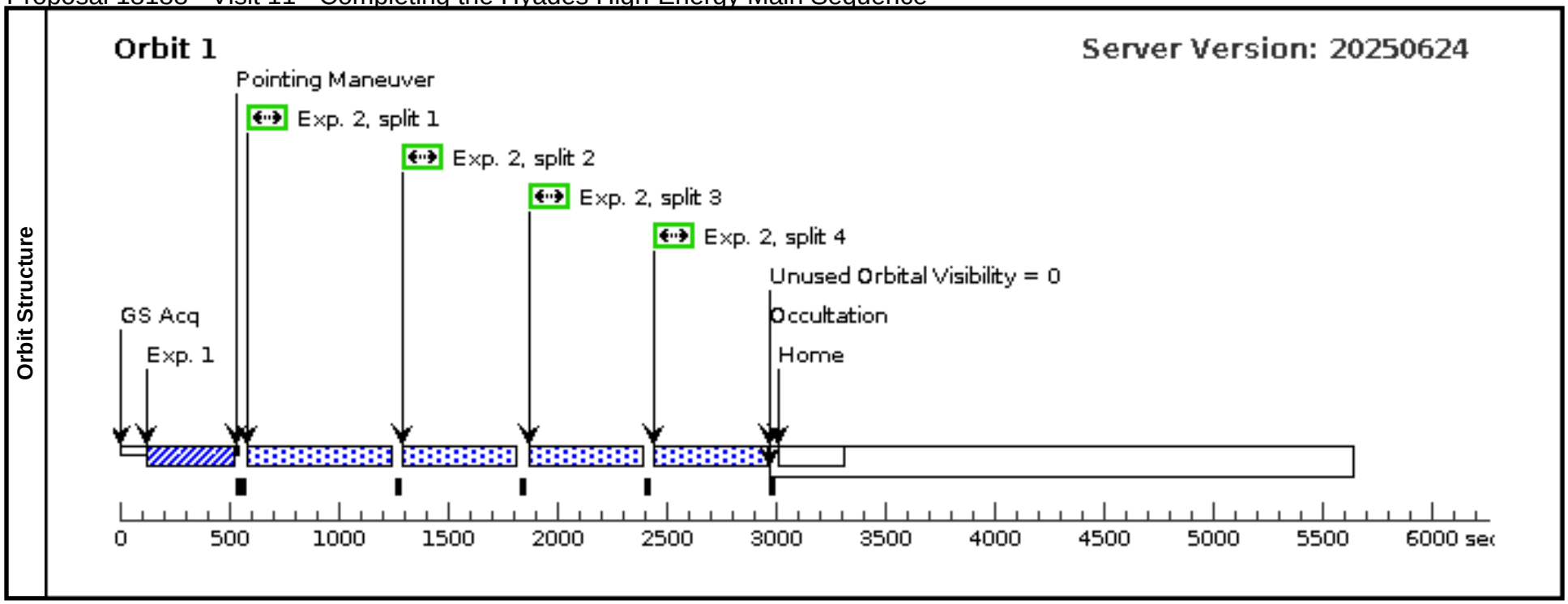
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	HD-29419	RA: 04 38 51.2920 (69.7137167d) Dec: +23 08 59.90 (23.14997d) Equinox: J2000	Proper Motion RA: +105.627 mas/yr Proper Motion Dec: -54.239 mas/yr Parallax: 0.0230344" Epoch of Position: 2000 Radial Velocity: +39.14 km/sec	V=7.501+/-0.1	Reference Frame: ICRS

Comments:
Category=STAR
Description=[G V-IV]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2026692)	(11) HD-29419	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				39.5 Secs (39.5 Secs) *[==>]*	 ***[1]***
Comments: Spectrum: Castelli-Kurucz Models F8V 6250 4.0 *Extinction E(B-V): None* *Normalization: Renormalized to vegamag = 7.501 in filter Johnson/V*									
2	(COS.sp.2026696)	(11) HD-29419	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			468 Secs (1872 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.									


Orbit Structure
Orbit 1
Server Version: 20250624
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Unused Orbital Visibility = 0
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18188, Visit 12, implementation Wed Nov 05 14:00:18 GMT 2025

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(12)	HD-30589	RA: 04 49 32.1249 (72.3838537d) Dec: +15 53 19.47 (15.88874d) Equinox: J2000	Proper Motion RA: +86.742 mas/yr Proper Motion Dec: -25.516 mas/yr Parallax: 0.0206244" Epoch of Position: 2000 Radial Velocity: +41.52 km/sec	V=7.739+/-0.1	Reference Frame: ICRS

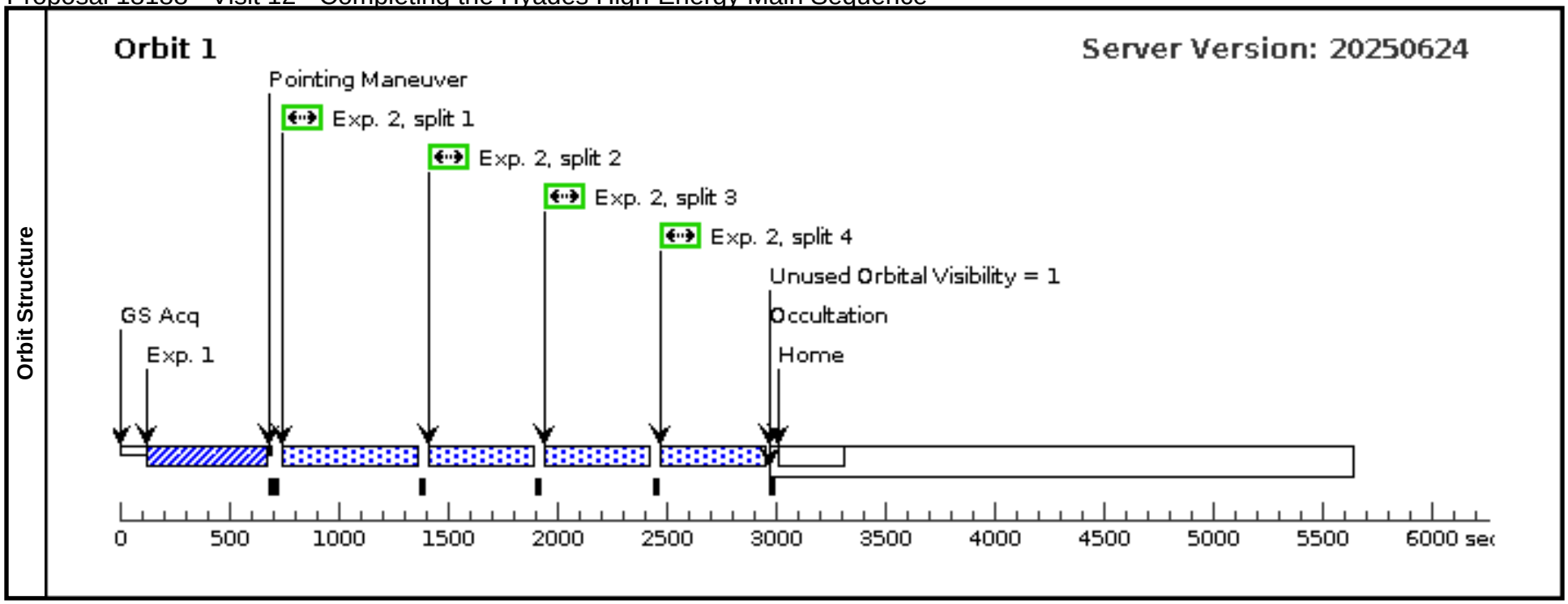
Comments:
Category=STAR
Description=[F3-F9]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.2145935)	(12) HD-30589	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				116 Secs (116 Secs) *[==>]*	 ***[1]***
2	(COS.sp.2026696)	(12) HD-30589	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=8300; FP-POS=ALL; SEGMENT=A			429 Secs (1716 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***

Comments: Spectrum: Castelli-Kurucz Models F8V 6250 4.0
Extinction E(B-V): None
Normalization: Renormalized to abmag = 12.98 in filter GALEX/NUV

Comments: User uploaded spectrum: CHI1ORI-to-Hyads.txt-- Hyades age G0 dwarf Chi1 Orionis STIS FUV+NUV echelle spectra scaled to average 46 pc distance of Hyades targets.


Orbit Structure
Orbit 1
Server Version: 20250624
Pointing Maneuver
Exp. 2, split 1
Exp. 2, split 2
Exp. 2, split 3
Exp. 2, split 4
Unused Orbital Visibility = 1
Occultation
Home
GS Acq
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec